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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/900,876 | 07/10/2001 | Katsuji Watanabe | 210847US0X | 5983 |
| 22850 | 7590 | 06/02/2004 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | MARSCHER, ARDIN H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1631 | |

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,876

Applicant(s)

WATANABE ET AL.

Examiner

Ardin Marschel

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,8,9,11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,8,9,11,13, and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/25/04
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Art Unit: 1631

DETAILED ACTION

Applicants' arguments, filed 2/25/04, have been fully considered and they are deemed to be persuasive to overcome previous rejections of record. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. Upon reconsideration, however, the following rejections and/or objections are newly applied. They constitute the complete set presently being applied to the instant application.

VAGUENESS AND INDEFINITENESS

Claims 1, 3, 4, 6, 8, 9, 11, 13, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 9-11, the "theoretical value calculating portion" is cited as outputting "theoretical restriction fragment patterns in which...theoretical restriction length values are stored". This portion is therefore cited as performing outputting which stores values which are conflicting practices thus making the claim vague and indefinite as to what practice is meant. In other words, outputting is a transfer of data whereas storage is directed to depositing data at a storage location. Such storage practice is reasonably interpreted as not being outputting. These conflicting practices are also correspondingly present in independent claims 6 and 11. Clarification via clearer claim wording is requested. Claims which depend from claims 1, 6, or 11 also contain this unclarity due to their dependence.

A relative term is cited at numerous locations in the instant claims in the phrase "in a related manner". See, for example, claim 1, line 7; claim 6, line 7; and claim 11,

Art Unit: 1631

line 7; as well at numerous other locations in the claims. There is no definition in the claims as to the metes and bounds as to what relatedness is practiced regarding these citations. Therefore, the cooperativity between data elements which are stored in a related manner in the various claim sections is undefined. Is merely storage together within a single database sufficient for such related manner storage? Such simple relatedness may be within the meaning of this phrase, however, this may also be reasonably interpreted as lacking in a clear and concise specific relatedness between data elements. Clarification via clearer claim wording is requested. Claims which depend from claims 1, 6, or 11 also contain this unclarity due to their dependence.

The independent claims have been amended to include an "amplified sequence recognizing portion" which produces "post-amplification base sequence data" which conflicts regarding the phrase "wherein said theoretical value calculating portion calculates..." because there is no limitation in said "amplified sequence recognizing portion" as to the source of the base sequence data from which the post-amplification base sequence data is produced. The "theoretical value calculating portion" in lines 3-11, of claim 1, for example, utilizes "known genes" for pattern calculations, in contrast to the "amplified sequence recognizing portion". Thus these two portions seem to be connected but yet confusingly are not directed to the same known gene sequences for calculation and amplification. Clarification via clearer claim wording is requested to remove this conflict in practice. Claims which depend from claims 1, 6, or 11 also contain this unclarity due to their dependence.

Art Unit: 1631

In the independent claims there are confusing citations directed to "known genes" vs. "kinds of known genes". For example, in claim 1, line 4, "known genes" are utilized for calculation, however, the data stored in line 7-8 is that of "kinds of known genes". This conversion from "known genes" to "kinds of known genes" is not clearly and concisely set forth in the claim. The mixing of "known genes" and "kinds of known genes" without clarity as to what calculation or definition of practice supports this is also present in numerous other citations in the claim. Similarly, "restriction enzymes" is mixed confusingly with "kinds of restriction enzymes" at various citations without defining the metes and bounds of the difference(s) between these limitations. Clarification via clearer claim wording is requested to remove these conflicts in practice. Claims which depend from claims 1, 6, or 11 also contain this unclarity due to their dependence.

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the Central PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The Central PTO Fax Center number is (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (571) 272-0718. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (571) 272-0722.

Application/Control Number: 09/900,876

Page 5

Art Unit: 1631

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Tina Plunkett, whose telephone number is (571) 272-0549.

May 28, 2004

Ardin H. Marschel 5/28/04
ARDIN H. MARSCHEL
PRIMARY EXAMINER